

United States Patent [19]

Oess et al.

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[54] **FLAT CRT SYSTEM**

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[51] Int. Cl.² **H01J 63/04; H01J 21/10**

[58] Field of Search **313/415, 422, 302, 495, 313/483, 409, 411, 414, 494; 315/366**

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[57].

ABSTRACT

A flat cathode ray tube device is provided for display of information by response to an electron beam of a phosphor coating on a face plate. A monolithic structure includes an x-y matrix of electron source cathodes and a pair of grid arrays successively spaced from the matrix with holes therethrough adjacent to and aligned with the cathodes selectively to form and individually control the intensity of an electron beam from each of said cathodes. Deflection control structure has holes through which the beams may pass with a set of x-y deflection electrodes associated with each of the holes for x-y control of the trajectory of each of the beams. A support plate forms the base of the monolithic structure with the cathodes mounted thereon and a face plate structure marginally sealed to the support plate provides a vacuum tight envelope housing the monolithic structure.

19 Claims, 10 Drawing Figures

